

# MERCURIC CHLORIDE

0979

November 2003

CAS No: 7487-94-7  
RTECS No: OV9100000  
UN No: 1624  
EC No: 080-010-00-X

Mercury dichloride  
Mercury (II) chloride  
HgCl<sub>2</sub>  
Molecular mass: 271.5

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: all extinguishing agents allowed.
<b>EXPLOSION</b>			

EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
<b>Inhalation</b>	Cough. Sore throat. Burning sensation. Shortness of breath.	Local exhaust or breathing protection.	Fresh air, rest. Half-upright position. Refer for medical attention.
<b>Skin</b>	MAY BE ABSORBED! Redness. Pain. Blisters. Skin burns.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
<b>Eyes</b>	Pain. Redness. Blurred vision. Severe deep burns.	Face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>	Abdominal cramps. Abdominal pain. Burning sensation. Metallic taste. Diarrhoea. Nausea. Sore throat. Vomiting. Shock or collapse.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Do NOT wash away into sewer. Sweep spilled substance into containers. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: chemical protection suit including self-contained breathing apparatus.)	T+ Symbol N Symbol R: 28-34-48/24/25-50/53 S: (1/2-)36/37/39-45-60-61 UN Hazard Class: 6.1 UN Pack Group: II  Do not transport with food and feedstuffs. Severe marine pollutant.

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-61GT5-II	Separated from food and feedstuffs, light metals.

## IMPORTANT DATA

**Physical State; Appearance**

WHITE CRYSTALS OR POWDER.

**Chemical dangers**

The substance decomposes due to heating producing toxic fumes of mercury and chlorine fumes. Reacts with light metals.

**Occupational exposure limits**

TLV: (as mercury) 0.025 mg/m<sup>3</sup>; (skin); A4; (ACGIH 2003).

**Routes of exposure**

The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

**Inhalation risk**

Evaporation at 20/C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

**Effects of short-term exposure**

The substance is irritating to the respiratory tract and is corrosive to the eyes and the skin. Corrosive on ingestion. The substance may cause effects on the gastrointestinal tract and kidneys, resulting in tissue lesions, kidney failure, collapse and death. Medical observation is indicated.

**Effects of long-term or repeated exposure**

Repeated or prolonged contact may cause skin sensitization. The substance may have effects on the central nervous system, peripheral nervous system and kidneys, resulting in ataxia, sensory and memory disturbances, fatigue, muscle weakness and kidney impairment.

## PHYSICAL PROPERTIES

Boiling point: 302/C  
Melting point: 276/C  
Density: 6.5 g/cm<sup>3</sup>

Solubility in water, g/100 ml at 20/C: 7.4  
Vapour pressure, Pa at 20/C: 0.1  
Octanol/water partition coefficient as log Pow: 0.1

## ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur along the food chain, for example in aquatic organisms. The substance may cause long-term effects in the aquatic environment.

## NOTES

Depending on the degree of exposure, periodic medical examination is indicated.  
Do NOT take working clothes home.

## ADDITIONAL INFORMATION

## LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible